

GENIA

Generative Design Operating System for Construction

2025.05



Grand Lisboa Macau

15

Structural Engineers

18

Months of Design

1,000

Excel Spreadsheets

750,000

Calculations

\$25B

Spent on design Software

65%

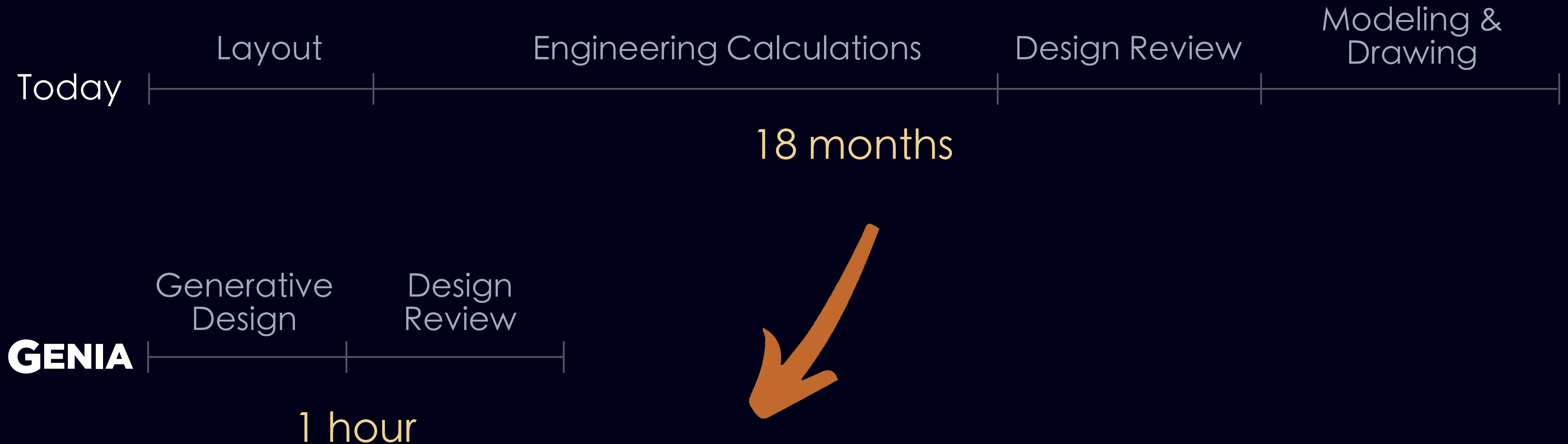
Pen & paper, Excel

40%

Permit rejections due to
simple human errors

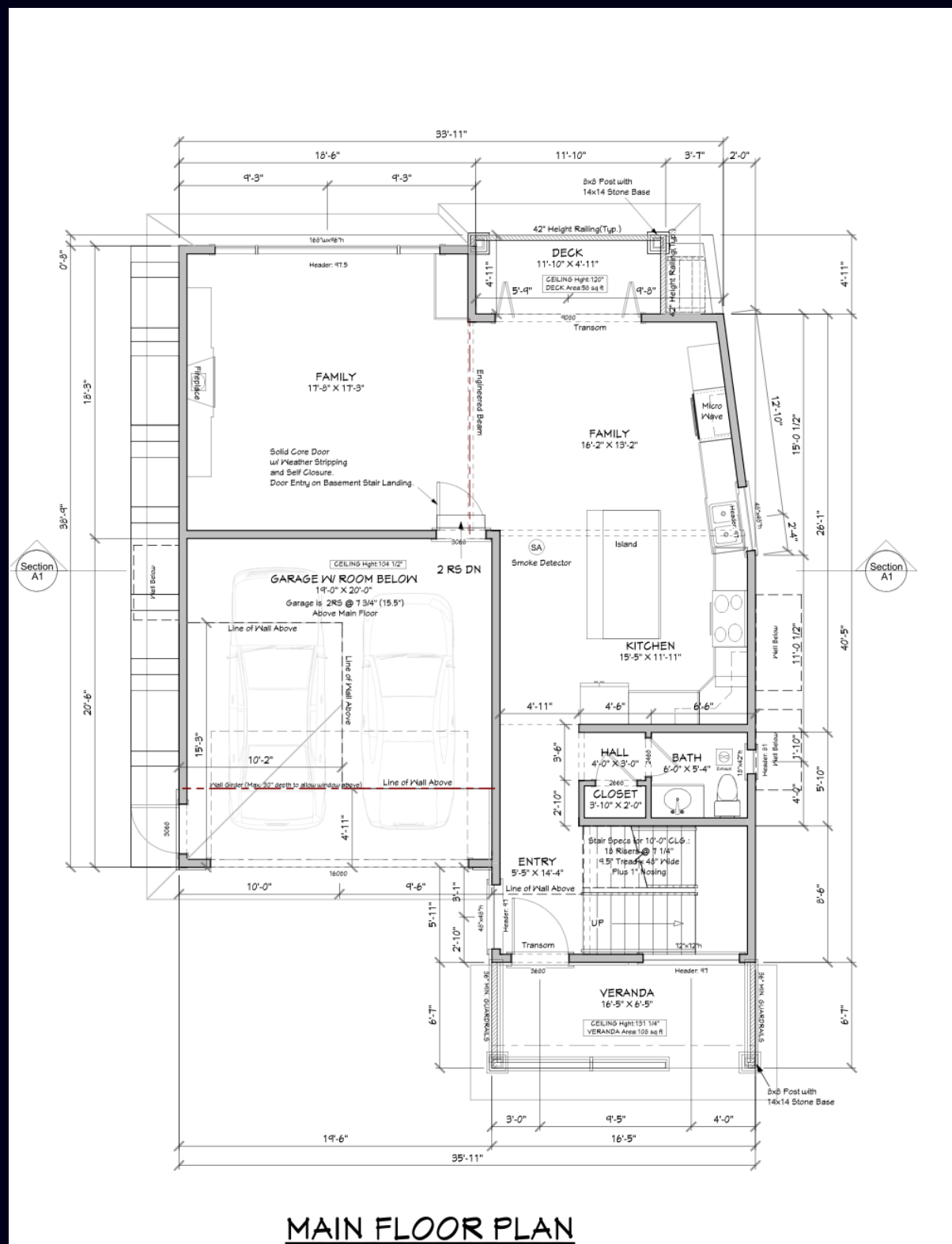
Engineering Design Today:
Manual, Repetitive,
Error Prone

Structural CoPilot = Doing More with Less!

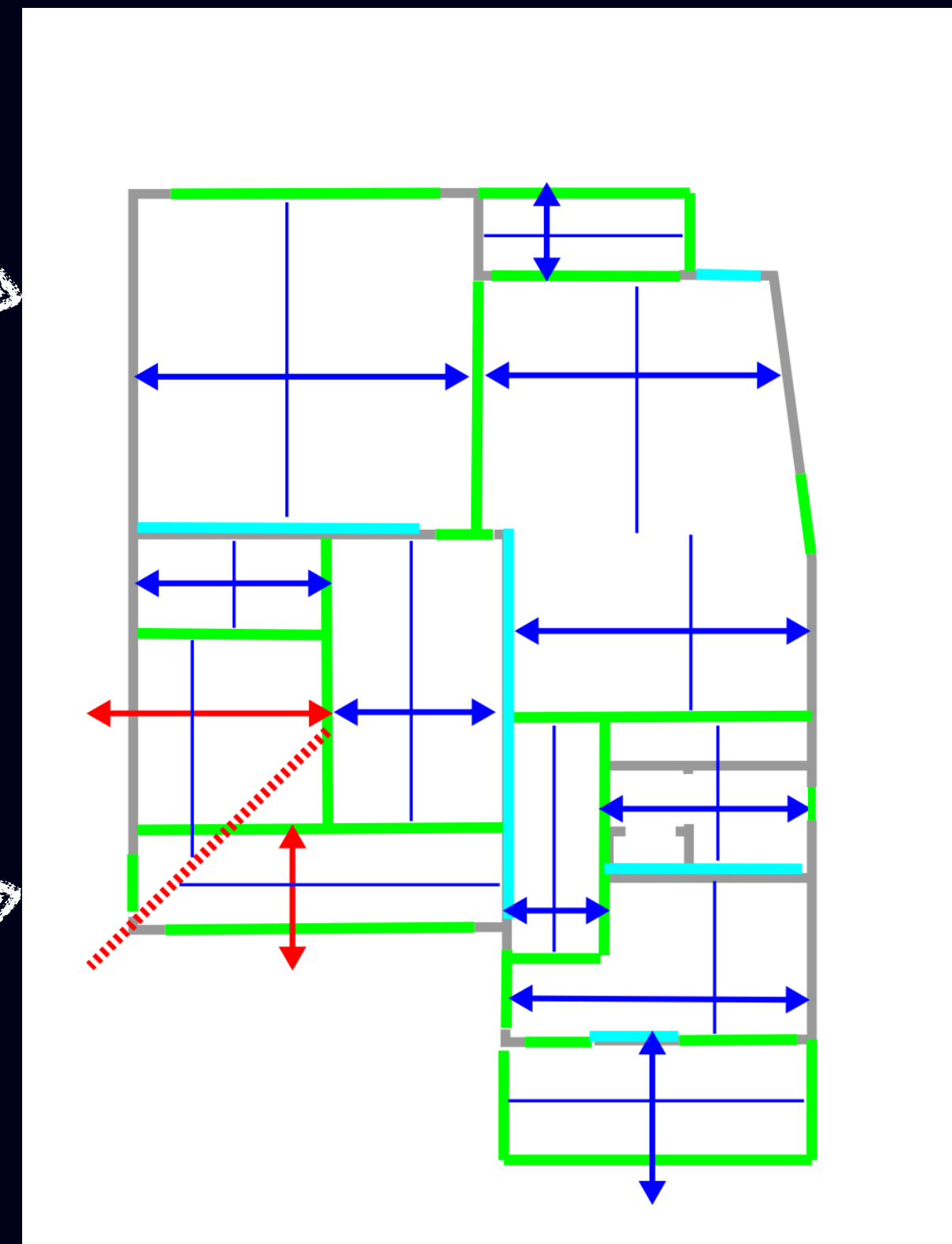


Generate Structural Drawings from Architectural

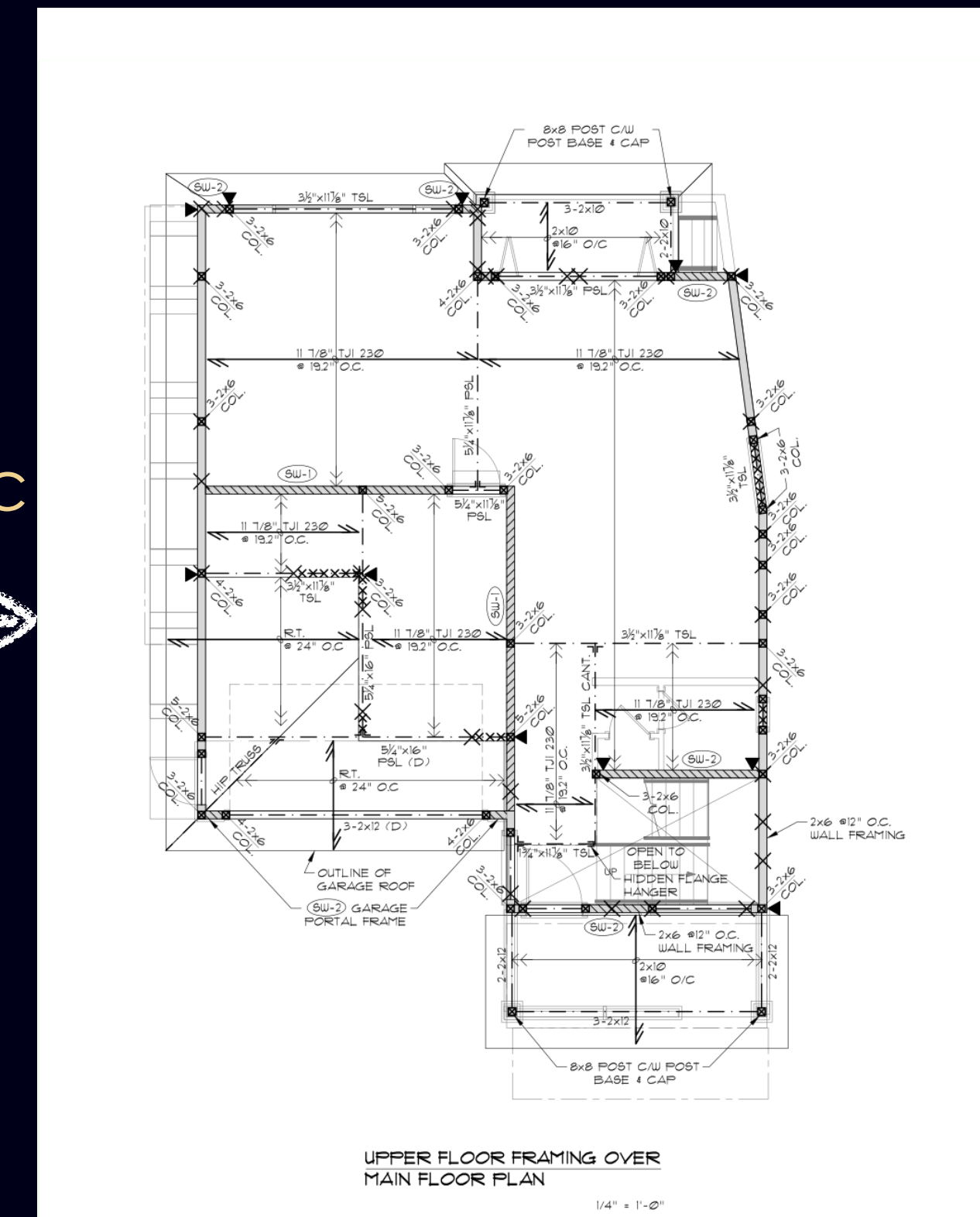
Architectural Design



Structural Plan



Structural Drawings



Programmatic drawing

GENIA

New
PROJECT

Adaptive
REUSE

Disaster
REBUILD

3D Printing
PREFAB



MULHERN+KULP
RESIDENTIAL STRUCTURAL ENGINEERING



CONTINUITY
Structural Engineering

SUFFOLK
DESIGN

PermitFlow

LOS ANGELES, CA
EST. 1987
ALISAL
BUILDERS
corporation

Mighty
Buildings

Structural CoPilot = Doing More with Less!

10x faster drawing generation

40% less human error

20% material savings

Win more projects, higher prices

GENIA : By Engineers, For Engineers

	GENIA	 Higharc	Enji Tech	 TANGO builder
Target customer	Engineer	Architect	Engineer	Engineer
Conceptual design	✓	✓	X	✓
Detailed design	✓	X	X	X
Generative design	AI-powered	AI + Manual	Manual	Template-based
Physics simulation	✓	X	X	X
Calculation sheet	✓	X	X	X
CAD/BIM modeling	✓	✓	X	✓

Interdisciplinary Founding Team: Structural + AI



Zhihao Zhao
CEO

10 years of product, biz dev, sales & marketing
Proven records of growing AI products from 0 to 1



Robin Li
COO

8 years in structural engineering
Designed residential & commercial in Canada & Asia



Dr. Peter Dai
Chief Scientist

10 years in deep generative AI
Publications on ICCV, CVPR
Built LLMs at Amazon



Houtao Wang
CTO

Serial entrepreneur & CTO leading full-stack tech teams
Launched B2B marketplace w/ \$300M+ GMV



GENIA supported by

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AMPLIFY

b^oostVC

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BOOST
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 DormRoomFund

scale


STARTUP
INDEX

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INCEPTION PROGRAM

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PLUGANDPLAY

P Permit*Flow*

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